



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/690,819	10/23/2003	Satoshi Ogata	61282-038	5430

7590 10/31/2007  
MCDERMOTT, WILL & EMERY  
600 13th Street, N.W.  
Washington, DC 20005-3096

EXAMINER
----------

PAUL, DISLER

ART UNIT	PAPER NUMBER
----------	--------------

2615

MAIL DATE	DELIVERY MODE
-----------	---------------

10/31/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/690,819	<b>Applicant(s)</b> OGATA, SATOSHI	
	<b>Examiner</b> Disler Paul	<b>Art Unit</b> 2615	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-32 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |  |
|--|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>10/23/03; 6/2/05; 8/17/07</u> . | 6) <input type="checkbox"/> Other: ____  |

## **DETAILED ACTION**

### ***Response to Amendment***

Sasaki disclose of a sound reproduction relocation output ratio based on the image positional angle of the sound source and the listeners arbitrary position for creating an enhanced and more sense of reproduced output sound, see (fig. 1-4, 5/ wt listener and speakers/ image screens to create virtual source and perceive sound by listener.)

1. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

3. Claims 1-2, 4-9, 11-13, 15-18 are rejected under 35 U.S.C. 102(a) as being anticipated by Sasaki ("2003/0118192 A1").

Re claim 1, Sasaki disclose an audio information transforming method applied to a video/audio format in which a screen includes a plurality of objects and each object has video information, position information, and audio information ("Fig.1-4(6); page 4[0051]/screen with sound/video info"), said method comprising the steps of: setting a virtual listening point at a position different from a basic listening point that is set as a position at which a listener listen to an audio (page 3 par[0041] start at line 9/listener may select angle mode for creating virtual position); having a basic listening positions ("fig.1-4(9)"); comparing a positional relationship between the basic listening point and the object with a positional relationship between the virtual listening point and the object (page 2[0018-0019,0007]/create positional between speaker and virtual speaker and sense direction of person denote virtual listening point for outputting signals; angle to select positions and modified for heightened sense of presence) and setting a position of a virtual sound source (page 2[0018]/creating virtual speakers); and changing an allocation ratio of an audio to a plurality of audio outputting means based on a the compared results in the comparing step, a virtual listening point, and the position of the virtual sound source(page 3[0041 begin line 9; [0033],[0070,0071]/output of virtual sounds sources with a person sense of presence based on calculations).

Art Unit: 2615

Similarly reclaims 4,8,11 have been analyzed and rejected with respect to claim 1 above.

Re claim 2, Sasaki disclose an audio information transforming method applied to a video/audio format in which a screen includes a plurality of objects and each object has video information, position information, and audio information ("Fig.1-4(6); page 4[0051]/screen with sound/video info"), said method comprising the steps of: setting a virtual listening point at a position different from a basic listening point that is set as a position at which a listener listen to an audio (page 3 par[0041] start at line 9/listener may select angle mode for creating virtual position); having a basic listening positions ("fig.1-4(9)"); comparing a positional relationship between the basic listening point and the virtual source with a positional relationship between the virtual listening point and the virtual source (page 2[0018-0019,0033]); and changing an allocation ratio of an audio to a plurality of audio outputting means based on a the compared results in the comparing step, a virtual listening point, and the position of the virtual sound source (page 3[0041 begin line 9; [0033],[0070,0071]/output of virtual sounds sources with a person sense of presence based on calculations).

Similarly reclaim 9 has been analyzed and rejected with respect to claim 2 above.

Re claim 5, the audio information transforming method according to claim 1, further comprising a step of: adding direction information to the virtual listening point (page 2[0018]create sense of presence with camera angle).

Re claims 6-7 have been analyzed and rejected with respect to claim 5 above.

Re claim 12, Sasaki disclose an audio information transforming device for a video/audio format in which a scene reproduced on a screen is constructed to contain objects and each object has video information, position information, and audio information ("Fig.1-4(6); page 4[0051]/screen with sound/video info"), said device comprising: a means for deciding a virtual listening point at a position different from a basic listening point that is set as a position at which a listener listens to an audio (page 3 par[0041] start at line 9/listener may select angle mode for creating virtual position); means for setting a position of the virtual sound source (page 2[0018]/creating virtual speakers) ; mean of comparing a positional relationship between the basic listening point and one of the object

Art Unit: 2615

with a positional relationship between the virtual listening point and one of the object (page 2[0018-0019]/create positional between speaker and virtual speaker and sense direction of person denote virtual listening point for outputting signals) and the means for changing an allocation ratio of an audio to a plurality of audio outputting means based on a result of the comparing means, a position of the virtual listening point and the position of the virtual source ("fig.1-4(5,7-8), controllers & speakers").

Re claim 15 has been analyzed and rejected with respect to claim 12.

Re claim 13, Sasaki disclose of an audio information transforming device for a video/audio format in which each scene produced on a screen has video information, audio information, and a virtual sound source ("Fig.1-4(6,7); page 4[0051]/screen with sound/video info and virtual source"), said device comprising: the means for deciding a virtual listening point at a position different from a basic listening point that is set as a position at which a listener listens to an audio (page 3 par[0041] start at line 9/listener may select angle mode for creating virtual position); the mean of comparing a positional relationship between the basic listening point and the virtual source with a positional relationship between the virtual listening point and the virtual sound source ("page 2[0021, fig.5,0054]/reproduced sense

Art Unit: 2615

image of sound-denote virtual source with respect to listener and different positions") and the means for changing an allocation ratio of an audio to a plurality of audio outputting means based on a result of the comparing means, a position of the virtual listening point and a position of the virtual sound source (fig.1 (5,7,8) controller & speakers, with person to sense image positions of speakers at varying positions").

Re claim 16, the audio information transforming device according to claim 12, wherein the virtual listening point and virtual sound source has direction information ("fig.5").

Re claims 17-18 have been analyzed and rejected with respect to claim 16 above.

### **Conclusion**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Disler Paul whose telephone number is 571-270-1187. The examiner can normally be reached on 7:30-5:00.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chin Vivian can be reached on 571-272-7848. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.



Art Unit: 2615

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

DP



WYAN CHIN  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2000